

AMENDMENT TO THE CLAIMS:

1-17. (Canceled)

18. (New) Mold closing unit having an apparatus for automatically adapting to the mold height of injection molds of variable height measured in closing direction for an injection molding machine for processing plastics materials and other plasticizable substances, the mold closing unit comprising:

a stationary mold carrier;

a movable mold carrier;

a closing device for moving the movable mold carrier in the closing direction towards the stationary mold carrier and away from the stationary mold carrier;

an injection mold of variable height measured in the closing direction, said injection mold being accomodatable in a distance between the stationary mold carrier and the movable mold carrier;

a supporting element for the closing device;

a mold height adjustment for adjusting the distance between stationary mold carrier and supporting element by moving the supporting element;

a drive for automatically adjusting the mold height adjustment;

a locking device for locking the supporting element in its respective position,

wherein a release position is provided in the displacement region of the movable mold carrier, the release position effecting the unlocking of the locking device when the movable mold carrier is in the release position.

19. (New) Mold closing unit according to claim 18, wherein the release position is externally of and at the end, which is remote from the stationary mold carrier, of an injection displacement region of the movable mold carrier, which injection displacement region is required for an injection molding process.

20. (New) Mold closing unit according to claim 18, wherein the mold height adjustment is disposed on the supporting element.

21. (New) Mold closing unit according to claim 18, wherein the mold height adjustment includes nuts, which engage by means of threaded portions on guiding elements for the supporting element and are adjustable by means of the drive.

22. (New) Mold closing unit according to claim 21, wherein at least two nuts in each case are clamped as a result of the effect of resilient means of the locking device.

23. (New) Mold closing unit according to claim 21, wherein the nuts abut against a clamping sleeve and the supporting element, both of which are in operative connection through connecting means mounted thereon and clamp the nuts under the effect of resilient means.

24. (New) Mold closing unit according to claim 23, wherein the connecting means are bolts which penetrate at least the supporting element, and in that spring washers are provided as the resilient means and are mounted between the bolts and a clamping sleeve and/or the supporting element.

25. (New) Mold closing unit according to claim 24, wherein the bolts are secured with a screw to the clamping sleeve and are mounted on the supporting element by means of the resilient means.

26. (New) Mold closing unit according to claim 18, wherein at least one unlocker is mounted on the supporting element and projects in the direction of the movable mold carrier as far as into the region of the release position, and wherein the movable mold carrier includes an actuating face, which, in the release position of the movable mold carrier, actuates the unlocker by lifting the locking effect of a resilient means.

27. (New) Mold closing unit according to claim 26, wherein the unlocker is a connecting means operatively connecting a clamping sleeve and the supporting element.

28. (New) Mold closing unit according to claim 26, wherein the actuating face is disposed in the region of a guiding bore for guiding the movable mold carrier along the guide elements.

29. (New) Method for automatically adapting the mold height of injection molds of variable height measured in closing direction on an injection molding machine for processing plastics materials and other plasticizable materials, the mold closing unit having:

- a stationary mold carrier,

- a movable mold carrier,

- a supporting element for a closing device for moving the movable mold carrier towards the stationary mold carrier and away from the stationary mold carrier,

a mold height adjustment,
a drive for adjusting the mold height,
a locking device for locking the supporting element in its respective position,
the method comprising:
releasing the supporting element from a position coordinated with a first mold height by opening the locking device;
changing a distance between the stationary mold carrier and the supporting element by moving the supporting element by means of the drive; and
securing the supporting element in a second position, coordinated with a new mold height by locking the locking device,
wherein the movable mold carrier, in a release position for releasing the supporting element, unlocks the locking device.

30. (New) Method according to claim 29, wherein the movable mold carrier is transferred by the closing device into a position for actuating the locking device.

31. (New) Method according to claim 30, wherein the position for actuating the locking device is at an end remote from the stationary mold carrier of an injection displacement region of the movable mold carrier required for an injection molding process.

32. (New) Method according to claim 29, wherein during the changing of the distance, supporting element and movable mold carrier are moved together.

33. (New) Method according to claim 29, wherein, for changing the distance, the drive actuates nuts and adjusts them along threaded portions, which, in the secured condition, are checked by the locking device.

34. (New) Method according to claims 33, wherein when the movable mold carrier approaches the supporting element, it releases resilient means and lifts the checking effect between the nuts.

35. (New) Method according to claims 34, wherein, through the movement of the movable mold carrier into the release position along guide elements, the force for lifting the effect of resilient means is introduced to the resilient means in a substantially linear manner.